



## SM NANO TiO<sub>2</sub>

<b>Model type:</b>	<b>SM NANO TiO<sub>2</sub> (Air Purifying Lamp)</b>
<b>Voltage:</b>	220-240V / 50Hz or 110V/50Hz
<b>Rating (Watt):</b>	25W = 125V Normal Bulb ( <b>Energy Saving Bulb</b> )
<b>Color Temperature:</b>	2700 warm white 4100 cool white
<b>Light output (Lumens):</b>	1350 1680
<b>Total length (cm):</b>	15 15
<b>Average life span (Hrs):</b>	8,000
<b>Fitting:</b>	E27 medium base
<b>Overall diameter (cm):</b>	18.5
<b>Warranty:</b>	2 weeks

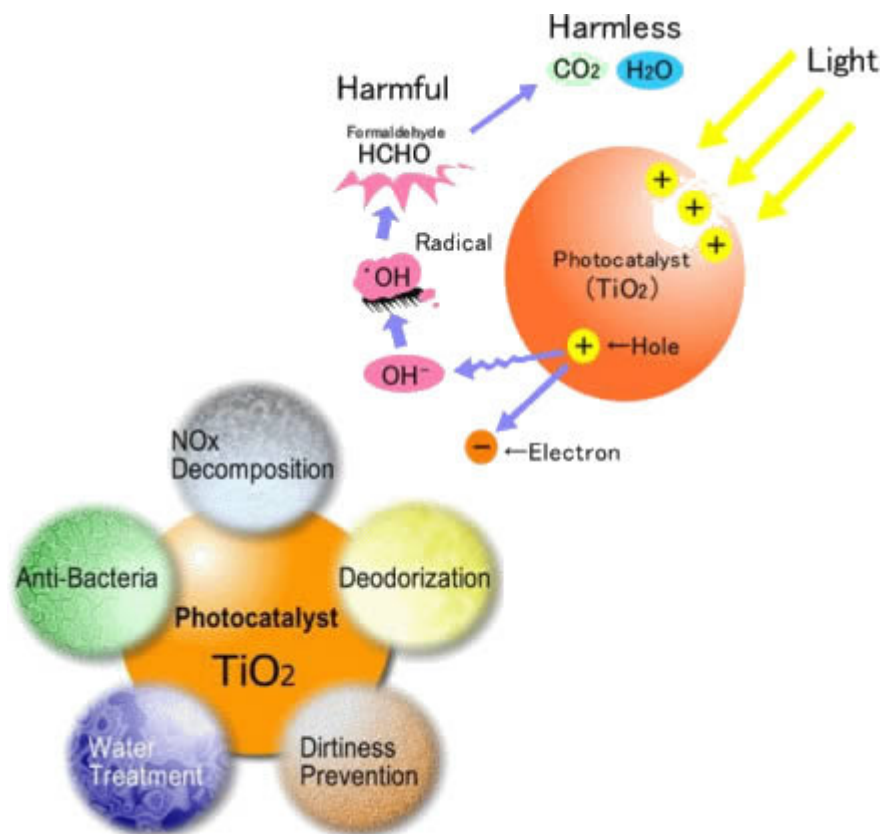


Figure above shows the TiO<sub>2</sub> Photocatalyst

## SM Nano TiO<sub>2</sub>

The **SM NANO TiO<sub>2</sub>** is an amazing technological breakthrough! We combined an energy efficient light source with a **TiO<sub>2</sub>** (titanium dioxide) coating to effectively help in the elimination of airborne bacteria, mold, viruses, fungi, smoke and household odors.

This state-of-the-art technology is not only effective and easy to use, but is the most affordable way to enjoy the benefits of **TiO<sub>2</sub>**'s (titanium dioxide) photocatalytic action. The **TiO<sub>2</sub>** (titanium dioxide) photocatalytic action is achieved when combined with a properly balanced light source. This action reduces harmful microorganisms into harmless CO<sub>2</sub> (carbon dioxide, which is expelled during the respiration process) and H<sub>2</sub>O (water), thus completely eliminating the microorganism, making **SM NANO TiO<sub>2</sub>** completely safe for humans and animals.

## Benefits of SM Nano TiO<sub>2</sub>

**SM NANO TiO<sub>2</sub>** is perfect for allergy sufferers, parents with young children, pet owners, smokers and anyone who wants a safe, natural, non-toxic way to help eliminate germs, smoke and odors without the use of harmful, poisonous chemicals.

In addition, the **SM NANO TiO<sub>2</sub>** is far more effective, easier to use and more cost effective than the currently popular HEPA filters. A lot of people may not realize this, but HEPA filters merely trap airborne particles, they do not actually destroy harmful bacteria, smoke and odors as the **SM NANO TiO<sub>2</sub>** does.



1. Unlike standard incandescent bulbs, the **SM NANO TiO<sub>2</sub>** emits virtually no heat.
2. **SM NANO TiO<sub>2</sub>** eliminates the growth of airborne pathogens, smoke and odors
3. **SM NANO TiO<sub>2</sub>** fits virtually anywhere a standard incandescent bulb can be used.
4. **SM NANO TiO<sub>2</sub>** is so energy efficient that it pays for itself, saving the user an average of RM50 in energy consumption over the life of the bulb (lasts up to 8,000 hours — 8 times longer than an average light bulb).
5. At 25 watts, the **SM NANO TiO<sub>2</sub>** gives off the same light output as a regular 60-watt incandescent bulb.
6. **SM NANO TiO<sub>2</sub>** is environmentally friendly, too, eliminating the need for poisonous chemical aerosol sprays, which are harmful to humans and animals, as well as the ozone layer.
7. The warm color of the **SM NANO TiO<sub>2</sub>** bulb replicates that of a standard incandescent light bulb, not the blue-white, color normally associated with fluorescent lights.
8. **SM NANO TiO<sub>2</sub>** does not have to be left on continually to be effective.
9. **TiO<sub>2</sub>** (titanium dioxide) bulb lasts for 8,000 hours. That is 8 times longer than your traditional incandescent light bulbs!

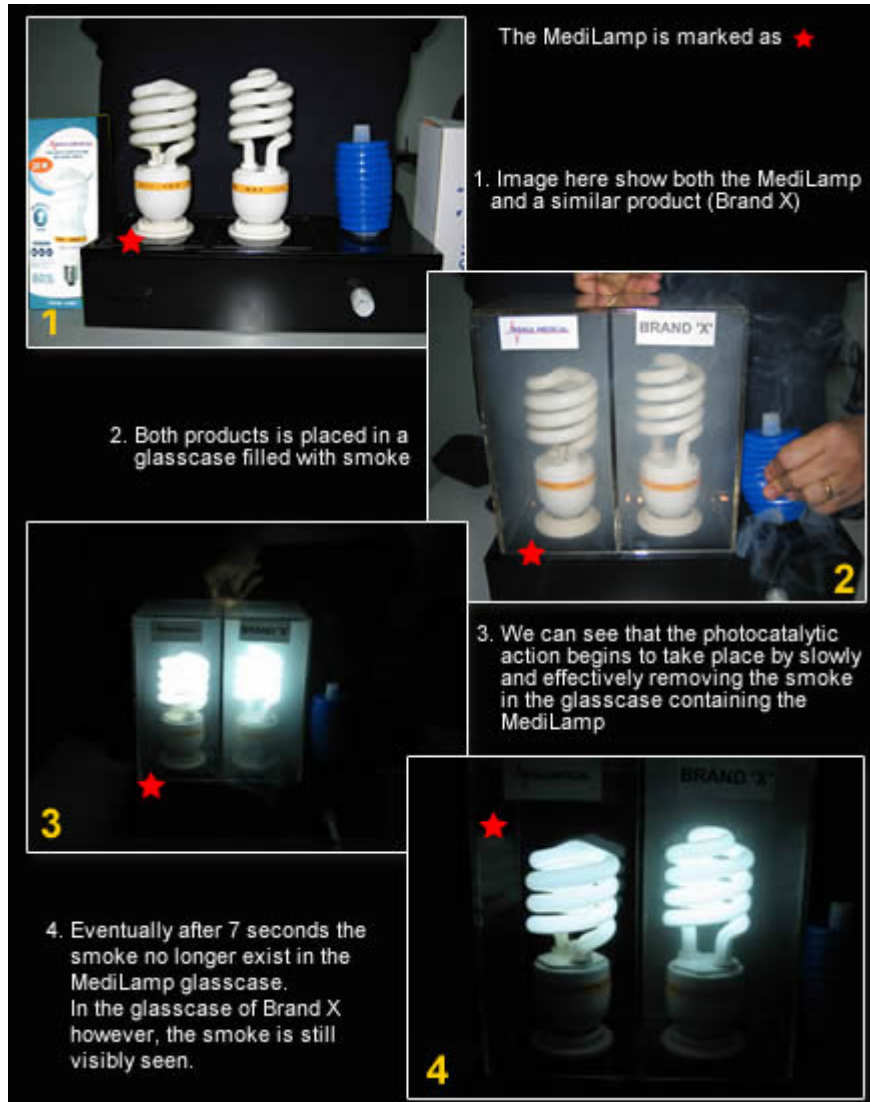


Figure above shows the TiO<sub>2</sub> smoke test against a similar product.

## F.A.Q. on the SM Nano TiO<sub>2</sub>

### TiO<sub>2</sub> (titanium dioxide) technology, how it works and how it has evolved?

The **SM NANO TiO<sub>2</sub>** is an amazing technological breakthrough!

We combined an energy efficient light source with a **TiO<sub>2</sub>** (titanium dioxide) coating to effectively help in the elimination of airborne bacteria, mold, viruses, fungi, smoke and household odors.

With the discovery of the proper binders, we were able to combine the liquid compound of **TiO<sub>2</sub>** (titanium dioxide) to a compact fluorescent light or warm light that will last for 8,000 hours. That is 8 times longer than your traditional incandescent light bulbs! This state-of-the-art technology is not only effective and easy to use, but is the most affordable way to enjoy the benefits of **TiO<sub>2</sub>'s** (titanium dioxide) photocatalytic action. The **TiO<sub>2</sub>** (titanium dioxide) photocatalytic action is achieved when combined with a properly balanced light source.

This action reduces harmful microorganisms into harmless CO<sub>2</sub> (carbon dioxide, which is expelled during the respiration process) and H<sub>2</sub>O (water), thus completely eliminating the microorganism, making **SM NANO TiO<sub>2</sub>** completely safe for humans and animals.

### **Must I leave the light on 24 hours a day?**

No, even intermittent usage helps eliminate airborne bacteria, mold, viruses, fungi, smoke and household odors. For example, an independent study on the loss of viability of E. coli cells under **TiO<sub>2</sub>** (titanium dioxide) photocatalytic reaction showed that after 15 minutes of illumination almost all cells were still viable; however, after 20 minutes only 12% of the cells retained their viability. At the end of 30 minutes of illumination more than 96% of the cells had lost their viability. This study went on to show that complete killing of these cells was achieved after 60 minutes of illumination. It was observed that the light source was turned off after 30 minutes followed by an additional 30 minutes of incubation and darkness, the viable cell count that was obtained at 60 minutes was similar to the sample that had undergone continuous illumination for 60 minutes. \*

### **What is TiO<sub>2</sub> (titanium dioxide)?**

**TiO<sub>2</sub>** (titanium dioxide) is an oxide of the metal titanium which occurs naturally as a rutile in some acid igneous rocks and metamorphic rocks, and is also in sedimentary rocks and beach sands. TiO<sub>2</sub> (titanium dioxide) is found in heavy mineral sand deposits rutile and is often associated with a common titanium mineral, ilmenite, together with zircon, monazite and magnetite.

### **Benefits of SM NANO TiO<sub>2</sub>.**

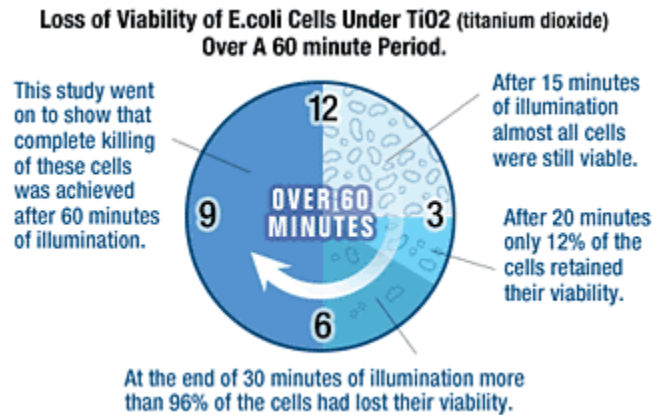
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